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### ASX Release 23 April 2019

# QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDING 31 MARCH 2019

### Highlights

### Mackay SOP Project

- Definitive Feasibility Study continues to advance
- Fieldwork included evaporation pond trial, trench pump testing, on-lake diamond drilling and other targeted hydrogeological investigations
- Australian Federal Budget allocates \$75 million of funding to the Tanami Road in Western Australia

### **Corporate**

• Cash balance of \$8.9 million at 31 March 2019

Agrimin Limited (ASX: AMN) ("Agrimin" or "the Company") is pleased to report its activities for the quarter ending 31 March 2019.

## Mackay SOP Project – Western Australia (100% owned)

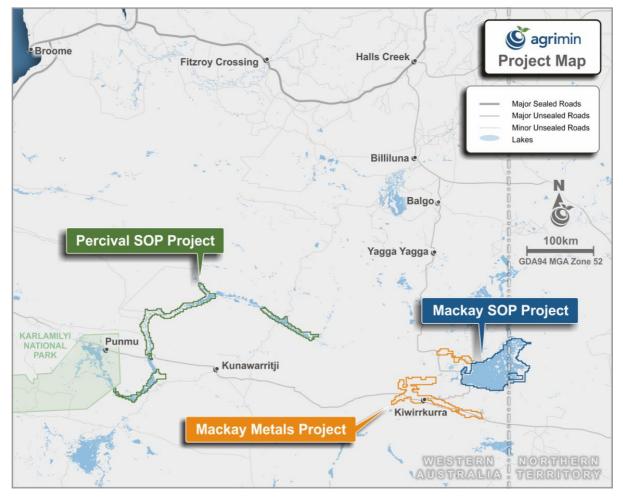
The Mackay Sulphate of Potash ("**SOP**") Project is located on Lake Mackay in Western Australia and is 100% owned by Agrimin. The Project tenements cover an area of 4,335km<sup>2</sup> and are located 785km south of Wyndham Port (**Figure 1**).

Lake Mackay's hydrogeological setting and significant size provide important attributes that support the development of a globally significant SOP operation. Lake Mackay is the largest known SOP-bearing salt lake in Australia and is the low point of an enormous groundwater and surface water catchment area. Lake Mackay covers an area of approximately 3,500km<sup>2</sup> and measures approximately 80km east-west and north-south. The salt lake is comparable in size to the two major sources of primary SOP production, being the 4,400km<sup>2</sup> Great Salt Lake in the USA and the 5,500km<sup>2</sup> Lop Nur (Luobupo operation) in China.

The closest community to the Mackay SOP Project is Kiwirrkurra which is located approximately 60km southwest. The Company has a Native Title Agreement in place that provides the necessary consents for the Project's development and operations.



Figure 1. Project Location Map



The Pre-Feasibility Study ("**PFS**") for the Mackay SOP Project was completed in May 2018. The PFS is based on the extraction of brine-hosted SOP from a single aquifer unit which commences approximately 40cm below ground surface. Brine is planned to be extracted solely from shallow trenches and fed into a series of solar evaporation ponds. Potassium-bearing salts will precipitate in the ponds and will be wet harvested and pumped to the process plant.

The process plant has been designed for a capacity of 426,000tpa of SOP as dry granular product, with the PFS assuming a product mix of 50% granular and 50% standard product. The PFS assumed all production is shipped through Wyndham Port to world markets.

Details of the PFS results were provided in the Company's ASX Release on 7 May 2018.

### **Definitive Feasibility Study**

The Definitive Feasibility Study ("**DFS**") for the Mackay SOP Project continued during the quarter. DFS fieldwork included the evaporation pond trial, trench pump testing, on-lake diamond drilling and other targeted hydrogeological investigations.

A combined gravity and passive seismic survey was undertaken in late 2018 across Lake Mackay in order to assist the mapping of the sedimentary sequence and basement profile of the salt lake. During the quarter, a four hole



diamond drilling program was completed to allow the calibration of geophysical data and the installation of longterm monitoring bores with specialised logging equipment into the basement beneath the salt lake.

The remaining fieldwork to support the DFS mine planning and Ore Reserve estimation is scheduled for completion in Q2-2019. This fieldwork includes ongoing wet-season trench pump testing and other targeted hydrogeological investigations.

The Company's pilot evaporation trial ramped up to steady-state operations throughout the quarter. The trial has operated as a continuous flow operation since November 2018 with brines being transferred through the pond system under a daily transfer regime. The Company's on-site process engineering team are monitoring the brine chemistry and salt formation in each pond on a daily basis. The evaporation ponds are planned to operate throughout 2019 to capture a full annual cycle of operating data and seasonal variation. Continued operations will provide increasing confidence in the pond model beyond the DFS. In addition, potash salts will be progressively harvested and utilised for product marketing purposes.

During the quarter, the Class-A evaporation pans measured evaporation rates for the summer months which were significantly higher than the rates applied to the PFS pond modelling for the same period. The higher than expected evaporation rate could have a positive impact on the DFS due to a reduction in the size of the full-scale evaporation ponds.

The Company's process and hydrogeological consultants have progressed a range of DFS engineering studies based on the collection of the above data.

During the quarter, the Company completed geophysical investigations in relation to an alternate process water borefield target located 70km north-west of the proposed process plant. This target is a known aquifer unit within the Canning Basin and has potential to host extensive quantities of fresh to brackish groundwater. Planning and approvals for an investigatory bore drilling and pump testing program are advanced. The PFS was based on a potential borefield located 38km south-east of the proposed process plant over which the Company undertook water exploration drilling in 2017. The Company believes the aquifer target within the Canning Basin could provide better quality water and therefore reduce the Project's requirement for reverse osmosis.

During the quarter, significant progress was achieved in respect to the new transport corridor between the Mackay SOP Project and Wyndham Port. Datasets from the geotechnical test pitting program and LiDAR survey have been received and the Company has awarded the DFS engineering design packages for road works.

The Company also continues to advance a range of options relating to the use of existing port infrastructure at Wyndham and/or the development of new infrastructure to support the shipment of SOP. The DFS will aim to incorporate the most cost effective port and shiploading operations based on the variety of cargo types and sizes requested by potential customers and off-takers.

### **Project Permitting**

During the quarter, the Company referred the Mackay SOP Project to the Environmental Protection Authority for assessment and the level of assessment was determined to be a Public Environmental Review. The Company has also referred the Project to the Commonwealth Department of the Environment and Energy for assessment.

During the quarter, the Company commenced preparing the documentation for the environmental review and completed a reconnaissance environmental survey along the proposed haul road corridor.



The Company also progressed native title consultations with respect to obtaining land access agreements for the proposed haul road corridor. The corridor passes through three native title determination areas, which includes Tjamu Tjamu (Aboriginal Corporation) RNTBC, Parna Ngururrpa (Aboriginal Corporation) RNTBC and Tjurabalan Native Title Land Aboriginal Corporation RNTBC.

### Project Financing

Agrimin continues to liaise with a number of potential strategic partners and traditional financiers. The Company also continues to assess a number of options in relation to off-take agreements which are aligned with the project execution strategy for the Mackay SOP Project.

Subsequent to the end of the quarter, the Federal Government announced an allocation of \$75 million in the Federal Budget to the Western Australian section of the Alice Springs to Halls Creek Corridor (i.e. the Tanami Road). This funding is anticipated to occur under the Australian Government's Roads of Strategic Importance ("**ROSI**") initiative.

In addition, the Northern Australia Infrastructure Facility ("**NAIF**") Board has previously expressed its interest in investigating the potential for NAIF support for the Project with particular reference to Agrimin's proposed infrastructure. The NAIF could potentially provide concessional longer term debt finance for the Project's proposed road works, which would be separate to any funding under the ROSI initiative.

### Percival SOP Project – Western Australia (100% owned)

In December 2018, the Company lodged five Exploration Licence applications located approximately 450km south-east of Broome, Western Australia. The applications cover an area of 2,792km<sup>2</sup> over the majority of an extensive 450km long lake system (**Figure 1**). Historic sampling of brine within the application area has returned the highest known Potassium grades from an Australian salt lake to date.

During the quarter, the Company attended a meeting in Broome with Western Desert Lands Aboriginal Corporation (Jamukurnu-Yapalikunu) RNTBC, the Native Title representative body for the Martu people. The Company plans to progress consultations with a view to having the Exploration Licences granted in 2019.

### **Corporate Activities**

### Share Issues

No ordinary shares or other securities were issued during the quarter.

### **Business Development**

Various business development opportunities are constantly under consideration, with all opportunities being assessed in the context of the Company's current strategic goals and risk profile.

During the quarter, the Company successfully signed a Mineral Exploration and Land Access Deed of Agreement for tenements E80/5173 and E80/5175 with Tjamu Tjamu (Aboriginal Corporation) RNTBC, the Native Title representative body for the Kiwirrkurra people. The tenements relate to the Mackay Metals Project (**Figure 1**).



# **Tenement Interests**

### Table 1. Schedule of Tenement Interests as at 31 March 2019

Tenement Ref.	Project	Holder	State	Status	Interest
· · · · · · ·		Exploration Licences		•	
E80/4887	Mackay SOP	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/4888	Mackay SOP	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/4889	Mackay SOP	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/4890	Mackay SOP	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/4893	Mackay SOP	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/4995	Mackay SOP	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/5055	Mackay SOP	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/5124	Mackay SOP	Agrimin Potash Pty Ltd	W.A.	Granted	100%
E80/5172	Mackay SOP	Agrimin Potash Pty Ltd	W.A.	Granted	100%
EL30651	Mackay SOP	Agrimin Limited	N.T.	Application	100%
EL31780	Mackay SOP	Agrimin Limited	N.T.	Application	100%
EL31781	Mackay SOP	Agrimin Limited	N.T.	Application	100%
E80/5173	Mackay Metals	Agrimin Metals Pty Ltd	W.A.	Granted	100%
E80/5175	Mackay Metals	Agrimin Metals Pty Ltd	W.A.	Application	100%
E80/5315	Mackay Metals	Agrimin Metals Pty Ltd	W.A.	Application	100%
E80/5316	Mackay Metals	Agrimin Metals Pty Ltd	W.A.	Application	100%
E80/5332	Mackay Metals	Agrimin Metals Pty Ltd	W.A.	Application	100%
E80/5333	Mackay Metals	Agrimin Metals Pty Ltd	W.A.	Application	100%
E80/5334	Mackay Metals	Agrimin Metals Pty Ltd	W.A.	Application	100%
E45/5417	Percival SOP	Agrimin Potash Pty Ltd	W.A.	Application	100%
E45/5418	Percival SOP	Agrimin Potash Pty Ltd	W.A.	Application	100%
E45/5419	Percival SOP	Agrimin Potash Pty Ltd	W.A.	Application	100%
E45/5420	Percival SOP	Agrimin Potash Pty Ltd	W.A.	Application	100%
E45/5421	Percival SOP	Agrimin Potash Pty Ltd	W.A.	Application	100%
		Miscellaneous Licences			
L80/87	Mackay SOP	Agrimin Potash Pty Ltd	W.A.	Granted	100%
L80/88	Mackay SOP	Agrimin Potash Pty Ltd	W.A.	Granted	100%
L80/95	Mackay SOP	Agrimin Potash Pty Ltd	W.A.	Application	100%
L80/96	Mackay SOP	Agrimin Potash Pty Ltd	W.A.	Granted	100%



### **Contacts**

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### About Agrimin

Based in Perth, Agrimin Limited is a leading fertilizer development company focused on the development of its 100% owned Mackay SOP Project. The Project is situated on Lake Mackay in Western Australia, the largest undeveloped SOP-bearing salt lake in the world. Agrimin is aiming to be a global supplier of high quality SOP fertilizer to both traditional and emerging value-added markets. Agrimin Limited's shares are traded on the Australian Stock Exchange (ASX: AMN).

### **Forward-Looking Statements**

This ASX Release may contain certain "forward-looking statements" which may be based on forward-looking information that are subject to a number of known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those presented here. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. Forward-looking information includes exchange rates; the proposed production plan; projected brine concentrations and recovery rates; uncertainties and risks regarding the estimated capital and operating costs; uncertainties and risks regarding the development timeline, including the need to obtain the necessary approvals. For a more detailed discussion of such risks and other factors, see the Company's Annual Reports, as well as the Company's other ASX Releases. Readers should not place undue reliance on forward-looking information. The Company does not undertake any obligation to release publicly any revisions to any forward-looking statement to reflect events or circumstances after the date of this ASX Release, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

#### **Competent Person's Statements**

The information in this ASX Release that relates to Exploration Results, Mineral Resource Estimates and Pre-Feasibility Study results are extracted from the relevant ASX Releases and are available on www.asx.com.au and Company's website on www.agrimin.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous ASX Releases and, in the case of the Mineral Resource, that all material assumptions and technical parameters underpinning the estimates in the ASX Release on 7 May 2018 continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the previous ASX Releases.